

What is claimed is:

1. An image processing apparatus that reads an image at a first resolution and produces a printed output at a second resolution higher than the first resolution, the apparatus  
5 comprising:

read means for reading image data of an original at the first resolution;

A/D converting means for subjecting the read image data to A/D conversion;

10 segmentation means for segmenting the A/D-converted image data into text image data and picture image data;

resolution converting means for converting the text image data to have a third resolution higher than the first resolution, and the picture image data to have a fourth resolution lower  
15 than the third resolution, the third resolution being an integral multiple of the fourth resolution, where the integral multiple is two or greater;

binarization means for binarizing the resolution-converted text image data and the resolution-converted picture  
20 image data;

reducing means for processing the binarized picture image data to match a size of pixels thereof with a size of pixels at the second resolution with the number of the pixels maintained;

25 developing means for generating copy pixels of the pixels

of the picture image data processed in the reducing means one by one with a mutual positional relation of the pixels maintained, and appending the copy pixels to a region of the picture image data before equalization processing was performed  
5 on the picture image data; and

printing means for printing the picture image data done with development processing and the text image data at the second resolution.

10 2. The image processing apparatus according to Claim 1, wherein the second resolution is equal to the third resolution.

3. The image processing apparatus according to Claim 1, wherein the binarization means binarizes the picture image data  
15 through one of error diffusion and a dither matrix method, and binarizes the text image data through a floating slice method.

4. An image processing apparatus that receives image data at a first resolution and produces printed data at a second  
20 resolution higher than the first resolution, the apparatus comprising:

A/D converting means for subjecting image data to A/D conversion;

segmentation means for segmenting the A/D-converted  
25 image data into text image data and picture image data;

resolution converting means for converting the text image data to have a third resolution higher than the first resolution, and the picture image data to have a fourth resolution lower than the third resolution, the third resolution being an  
5 integral multiple of the fourth resolution, where the integral multiple is two or greater;

binarization means for binarizing the resolution-converted text image data and the resolution-converted picture image data;

10 reducing means for processing the binarized picture image data to match a size of pixels thereof with a size of pixels at the second resolution with the number of the pixels maintained; and

developing means for generating copy pixels of the pixels  
15 of the picture image data processed in the reducing means one by one with a mutual positional relation of the pixels maintained, and appending the copy pixels to a region of the picture image data before equalization processing was performed on the picture image data.

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